

CLAIMS

What is claimed is:

- 1 1. An electrical fuse box comprising:
 - 2 an upper frame;
 - 3 a plurality of electrical components pre-assembled within said upper frame;
 - 4 a lower frame, wherein said lower frame is dimensioned and configured to engage
 - 5 said upper frame;
 - 6 a plurality of connector modules pre-assembled within said lower frame, wherein said
 - 7 connector modules are dimensioned and configured to electrically engage electrical wires;
 - 8 an upper cover mounted on said upper frame; and
 - 9 a lower cover mounted on said lower frame.
- 1 2. The electrical fuse box of claim 1, wherein said electrical components comprise
- 2 relays, circuit breakers, J-case fuses, and blade fuses.
- 1 3. The electrical fuse box of claim 1, further comprising spacers positioned within said
- 2 lower frame for locking said electrical wires.
- 1 4. The electrical fuse box of claim 1, wherein said connector modules make an electrical
- 2 connection with said electrical components.

1 5. The electrical fuse box of claim 1, wherein each of said upper frame and lower frame
2 comprises at least one locking receiver.

1 6. The electrical fuse box of claim 5, wherein each of said upper cover and said lower
2 cover comprise a locking member dimensioned and configured to engage said locking
3 receiver of said upper frame and said lower frame, respectively.

1 7. The electrical fuse box of claim 1, wherein each of said upper cover and said lower
2 cover are pivotally mounted on said upper frame and said lower frame, respectively.

1 8. An electrical fuse relay box comprising:
2 an upper frame having an upper compartment;
3 a plurality of electrical components pre-assembled within said upper compartment;
4 a lower frame having a lower compartment, wherein said lower frame is dimensioned
5 and configured to engage said upper frame;
6 a plurality of connector modules pre-assembled within said lower compartment,
7 wherein said connector modules are dimensioned and configured to electrically engage
8 electrical wires;
9 an upper cover mounted on said upper compartment; and
10 a lower cover mounted on said lower compartment.

1 9. The electrical fuse relay box of claim 8, wherein said electrical components comprise
2 relays, circuit breakers, J-case fuses, and blade fuses.

1 10. The electrical fuse relay box of claim 8, further comprising spacers positioned within
2 said lower compartment for locking said electrical wires.

1 11. The electrical fuse relay box of claim 8, wherein said connector modules make an
2 electrical connection with said electrical components.

1 12. The electrical fuse relay box of claim 8, wherein each of said upper frame and said
2 lower frame comprises at least one locking receiver.

1 13. The electrical fuse relay box of claim 12, wherein each of said upper cover and said
2 lower cover comprise a locking member dimensioned and configured to engage said locking
3 receiver of said upper frame and said lower frame, respectively.

1 14. The electrical fuse relay box of claim 8, wherein each of said upper cover and said
2 lower cover are pivotally mounted on said upper frame and said lower frame, respectively.

1 15. An electrical fuse relay box comprising:
2 an upper frame having an upper compartment and a first locking receiver;
3 a plurality of electrical components pre-assembled within said upper compartment;
4 a lower frame having a lower compartment and a second locking receiver, wherein
5 said lower frame is dimensioned and configured to engage said upper frame;

6 a plurality of connector modules pre-assembled within said lower compartment,
7 wherein said connector modules are dimensioned and configured to electrically engage
8 electrical wires;
9 spacers positioned within the lower compartment for locking said electrical wires;
10 an upper cover pivotally mounted on said upper compartment; and
11 a lower cover pivotally mounted on said lower compartment,
12 wherein said upper cover comprises a first locking member dimensioned and
13 configured to engage said first locking receiver, and
14 wherein said lower cover comprises a second locking member dimensioned and
15 configured to engage said second locking receiver.

1 16. The electrical fuse relay box of claim 15, wherein said electrical components
2 comprise relays, circuit breakers, J-case fuses, and blade fuses.

1 17. The electrical fuse relay box of claim 15, wherein said connector modules make an
2 electrical connection with said electrical components.

1 18. A method of pre-assembling an electrical fuse relay box, said electrical fuse relay box
2 comprising an upper frame attached to a lower frame, said upper frame having an upper
3 compartment and said lower frame having a lower compartment, said method comprising:
4 mounting a plurality of electrical components within said upper compartment in a
5 pre-locked position;

6 mounting a plurality of connector modules and spacers within said lower
7 compartment, wherein said connector modules being configured for electrically engaging
8 electrical wires;
9 positioning an upper cover on said upper compartment;
10 positioning a lower cover on said lower compartment;
11 locking said electrical wires into position with said spacers;
12 pushing said electrical components into a set position; and
13 attaching said upper frame to said lower frame.

1 19. The method of claim 18, wherein said electrical components comprise relays, circuit
2 breakers, J-case fuses, and blade fuses.

1 20. The method of claim 18, wherein said connector modules make an electrical
2 connection with said electrical components.

1 21. The method of claim 18, wherein each of said upper frame and said lower frame
2 comprises at least one locking receiver.

1 22. The method of claim 21, wherein each of said upper cover and said lower cover
2 comprise a locking member dimensioned and configured to engage said locking receiver of
3 said upper frame and said lower frame, respectively.

1 23. The method of claim 18, further comprising locking said electrical fuse box by
2 pivotally mounting said upper cover and said lower cover on said upper frame and said lower
3 frame, respectively.